Quality Control

Work Ord November-11-1				*109	3115*						Page 1	÷
Item ID: Revision ID: Item Name:	D3953-7 Spring Spacer			Accept	*N900	<u>040</u>	100)* s	etup Star Stoj	I VI	S1* S2*	: .
Start Date: Required Date Reference:	11/11/13	Start Qty: 60.00 Req'd Qty: 60.00	*60* *60*		Cust Item I Customer:	ID:				IN	5/	
Approvals:	Process Pla	in: <u>ML3</u>	Date: 13:11-11 Date:	Tooling: SPC (Y/N):		ate:		R	Star Stop	, "I V I	R1* R2*	:
Sequence ID/ Work Center I	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	- [-
Draw Nbr	Rev	ision Nbr										
D3953	С											
100				0.00		ATTENDED TO STATE OF THE STATE					01	
*1 \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	he Small	Memo TURN AS F FOLIO REV DWG REV: DEBURR		0.00				le0	Ø		<u>\$4-13-</u>	11-2
110 * *11 0*		QC2- Inspect parts off m	nachine FAI/FAIB	0.00				60	Ø		113-	11-70
QC		Memo		0.00							_ <v_g< td=""><td>1</td></v_g<>	1

DQA:			Date:			-								
						WORK ORDER NON-	-CC	ONFO	RMANCE / UP					AEROSPACE
QA Closed:			Date:		-		_			\	WOI	rk Order up	date only	
Work Orde	er:					DISPOSITION				AGAINST [DEP.	ARTMENT/	PROCESS	
	•					Rework		Skid-tube Crosstube		Crosstube		Water Jet		Engineering
Part N	lo.					Scrap			Machining	Small Fab	┪	Proc	d. Eng. Coor.	Quality
	•					Use-as-is			noforming	Finishing	┪		e/Packaging	Other
NCR N	10.				'	Suspected Unapproved			Large Fab	Composite			Supplier	
								T		-	a: a I		<u> </u>	
Root					Desci	ription of work order update		nitial	Actio		-	Sign &		
Cause	-	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descrip	otion	+	Date	Verification	QC Inspector
Design														
Doc/Data	\dashv													
Equip/Tooling	_										İ			
Handling/Pre						,					-			
Material	\dashv										1			ĺ
Operator Offset/Setup														
Process	_										1			
Supplier,														
Training														
Transport														
Unapproved			1									Î		
							FAI	ULT CA	TEGORY					<u> </u>
Landi	ng (Gear				General								
		Bending				Bend		Folio/I	Program		\Box	Outside Dim	ensions	Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			(°	Over/Under	tolerance	Set-up
:		Cracks			L	Broken/Damage/Defect		Hardwa	are		_	Part Incorrec	:i	Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspect	tion Incomplete/Und	qualified	الـــ	Part Lost/Mi	ssing	Weld
		Cuffs			<u> </u>	Contamination	L	4	tions Incomplete/Ur	nclear		Part Moved		Wrong Stock Pulled
	L	Crushing			_	Countersink	<u></u>	•	gned/off center	1	_	Positioned W	· ·	_
			Cut Too Short		Mislab		Ĺ		Power Loss/S	Surge	Other			
	Inspection Strip in Tube		Drawing	L	Misrea			_						
			Drill Holes	<u> </u>	Off-set			_						
	Turning Sequence			Finish	<u></u>	4	Calibration		_					
	Wave/Twist in Tube			oe -		Fit/Function		Out of	Sequence					

W	nrk	Order	r ID	1091	15
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QC

Quality Control

Memo

109115

Page 2

November-11-13 1:55:31 PM Item ID: D3953-7 Accept *N900040100* Setup Start **Revision ID:** Stop Item Name: Spring Spacer *60* **Start Date:** 11/11/13 **Start Qty: 60.00 Cust Item ID:** Required Date: 11/25/13 Req'd Qty: 60.00 *60* **Customer:** Reference: Run Process Plan: _____ Date: ____ Tooling: Approvals: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ **Tool ID** Tool # Plan Accept Reject Reject Insp. Number Stamp Work Center ID Description Code Qty Qty **Run Hours** Int 13/11/25 120 QC8- Inspect parts - second check 0.00 60 0 *120* 0.00 Memo Quality Control Identify as per dwg & Stock Location: 0.00 130 *120* 0.00 Packaging Memo Packaging DAS 26 QC21- Final Inspection - Work Order Release 0.00 *140* 0.00

NB-11-24

DQA:		- · · · · · · · · · · · · · · · · · · ·	Date:									TRAGE	
QA Closed:			Date:			WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE	w	ork Order up	odate only	AEROSPACE
						DISPOSITION			AGAIN		PARTMENT	- 1	1
Work Orde	er:									. —	3		, . .
Part N	lo.					Rework Scrap		t .	Skid-tube Crosstu Machining Small F	ab	4	Water Jet d. Eng. Coor	Engineering Quality
NCR N	10.					Use-as-is Suspected Unapproved		Therr	noforming Finish Large Fab Compos		Rec/Stor	e/Packaging Supplier	Other
Root					Desci	ription of work order update		Initial	Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Design													
Doc/Data													
Equip/Tooling													
Handling/Pre							İ						
Material													
Operator													
Offset/Setup													
Process													
Supplier							1						
Training]										
Transport													
Unapproved													
			1	L	1		FA	ULT CA	TEGORY				<u> </u>
Landi	ng (Gear				General					····		
	Ŏ	Bending				Bend		Folio/i	Program		Outside Dim	ensions	Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up
		Cracks				Broken/Damage/Defect	Г	Hardwa	are		Part Incorred	 	Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs	Г	4	ion Incomplete/Unqualified		Part Lost/Mi	ssing	Weld
		Cuffs		,		Contamination		- i	tions Incomplete/Unclear		Part Moved		Wrong Stock Pulled
		Crushing				Countersink		-₹	gned/off center		Positioned V	ــــ Vrong	j
		Heat Trea	at			Cut Too Short	T	Mislab	-		Power Loss/		Other
	Inspection Strip in Tube			Drawing	H	Misrea		_	_	. 5-			
	-	Marks/Ch	•		—	Drill Holes		Off-set					
	_	Turning S				Finish	 	-	Calibration				
	\vdash	Wave/Tw			\vdash	Fit/Function	\vdash	4	Sequence				
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Picklist Print

November-11-13 1:55:35 PM

Work Order ID: 109115

109115

Parent Item:

D3953-7

D3953-7

Parent Item Name: Spring Spacer

Start Date: 11/11/13

Required Date: 11/25/13

Start Qty: 60.00

2.416

Required Qty: 60.00

Comments:

IPP RevA: New issue DD verified by:EC

IPP Rev:B as per dwg

revC DD 10.03.02 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status	
MDELRINR0.750		Purchased	No			100	f	128.0000	0.05	4				-;

MDFI RINRO 750
Delrin Round Bar 0.75"

Location

Loc Qty 128

Page 1

Loc Code MAT018 2.414 m127442 128

DQA:			Date:										
QA Closed:			Date:			WORK ORDER NON-	-CC	ONFO	RIMANCE / UPDATE		ork Order up	date only	AEROSPACE
		-				DISPOSITION		1	AGA		PARTMENT/		
Work Orde	er:										- 1	_	
Part N	lo.					Rework Scrap			Machining Sma	stube II Fab		Water Jet d. Eng. Coor.	Engineering Quality
NCR No.				Use-as-is Suspected Unapproved		Thern	· -	ishing posite	Rec/Stor	e/Packaging Supplier	Other		
Root					Desci	ription of work order update	Ī	nitial	Action		Sign &		
Cause		Date	Step	Qty	<u> </u>	or non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Design													
Doc/Data	_												
Equip/Tooling	_												
Handling/Pre	_												
Material									<u> </u>				
Operator													
Offset/Setup													
Process													
Supplier									:				
Training		:											
Transport													
Unapproved													
							FA	ULT CA	TEGORY				
Landi	ng (Gear				General				_	•		_
		Bending				Bend		Folio/f	Program		Outside Dim	ensions	Pressure/Forced
		Centre No	t Concer	ntric		BOM/Route		Grain		L	Over/Under	tolerance	Set-up
		Cracks				Broken/Damage/Defect		Hardwa	are	L	Part Incorred	:i	Temperature/Cure
		Crimp/Kir	k/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Unqualifie	d L	Part Lost/Mi	ssing	Weld
		Cuffs				Contamination		Instruc	tions Incomplete/Unclear		Part Moved		Wrong Stock Pulled
		Crushing				Countersink		Misali	gned/off center		Positioned V	Vrong	
	\mathbf{H}		Cut Too Short		Mislab	eled		Power Loss/	Surge	Other			
		Inspection	n Strip in	Tube		Drawing		Misrea	d				
		Marks/Ch	atter			Drill Holes		Off-set					
		Turning S				Finish		Out of	Calibration				
		Wave/Twist in Tube				Fit/Function		Out of	Sequence				

DART AEROSPACE LTD	Work Order:	109115
Description: Gas Spring Spacer	Part Number:	D3953-7
Inspection Dwg: D3953 Rev: C		Page 1 of 1

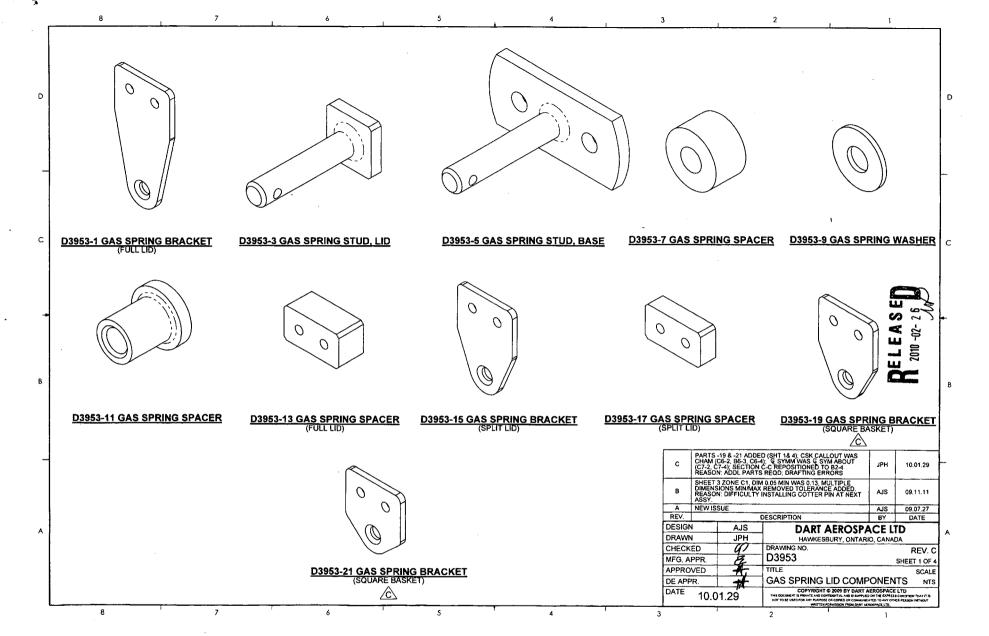
FIRST ARTICLE INSPECTION CHECKLIST

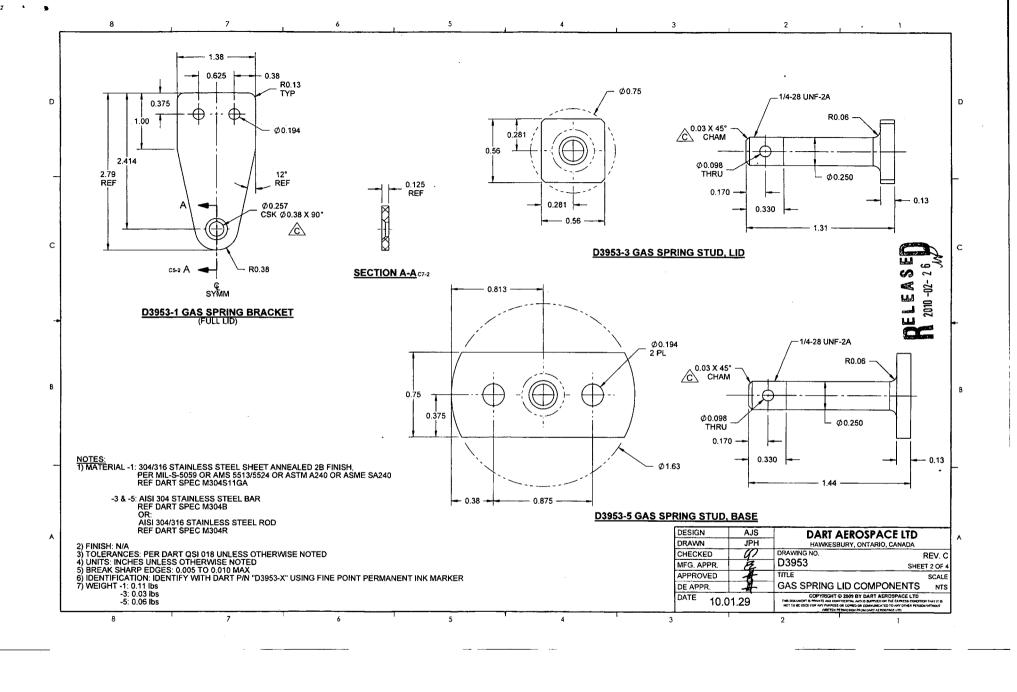
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.63	+/-0.030	. 629			5108	Vein
Ø0.257	+0.006/-0.001	. 629	/		11	
0.37	+0.000/-0.030	.360	/		u	
-						

Measured by:		Audited by:	and	Preliminary Approval:	
Date:	13-11-24	Date:	13/11/25	Date:	

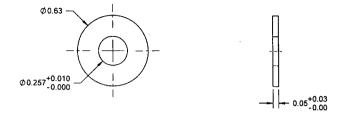
Date	Change	Revised by	Approved
09.10.22	New Issue	KJ	
09.12.14	Dwg Rev updated	KJ	<u> </u>
10.06.07	Tolerance revised for dimension 0.37	KJ SEE	<u>M</u>
_	09.10.22 09.12.14	09.10.22 New Issue 09.12.14 Dwg Rev updated	09.10.22 New Issue KJ 09.12.14 Dwg Rev updated KJ

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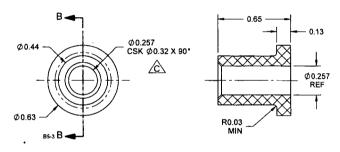




Ø0.257+0.010 Ø0.63 0.37+0.00 **D3953-7 GAS SPRING SPACER**

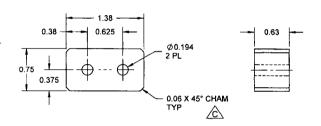


D3953-9 GAS SPRING WASHER





SECTION B-B B7-3



D3953-13 GAS SPRING SPACER

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Π	2 010	-02-	2	ار 6	Į
				104	

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	JPH	HAWKESBURY, ONTARIO, CANADA	
CHECKED	9		EV.·C
MFG. APPR.	3	D3953 SHEET	3 OF 4
APPROVED	-	TITLE	SCALE
DE APPR.	#	GAS SPRING LID COMPONENTS	NTS
DATE 10.01.29		COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CHARDISM'S AND IS SUPPLIED ON THE CAMES CONTINUE THAT IT IS NOT TO BE USED FOR ANY PURPOSE ON COMED OR COMMUNICATIO TO MAY OTHER PERSON NATIONAL WRITTER PERSONS FROM DART ARROPMECT TO.	

NOTES: 1) MATERIAL -7,-9 & -11: DELRIN II 150E OR ACETRON GP ACETAL, BLACK REF DART SPEC M-DELRIN-R

-13: AISI 304 STAINLESS STEEL BAR REF DART SPEC M304B

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D

2) FINISH: N/A 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED 4) UNITS: INCHES UNLESS OTHERWISE NOTED 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

5) IDENTIFICATION -13 ONLY: IDENTIFY WITH DART P/N "D3953-13" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT -7/-9/-11: < 0.01 lbs EACH

-13: 0.17 lbs

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